3. AVAILABILITY OF PUBLIC SERVICES

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service, or other special district. Usually, new development will create an incremental increase in the demand for these services. The amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing.)

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). These impacts are economic; not environmental.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have a physical impact on the environment.

3.1 Public Safety

The City's Department of Public Safety (DPS) provides police and fire services. There are over 200 officers in DPS that provide police and fire protection services to the City. All of the officers train and work in both police and fire.

The City of Sunnyvale participates in a mutual aid program with neighboring cities, including Mountain View, Santa Clara, and San José. Through this program, should Sunnyvale need additional assistance, one or more of the mutual aid cities would provide assistance in whatever capacity was needed. The City of Sunnyvale has a total of six fire stations. Their apparatus includes two fire trucks and six fire engines. The fire response time goal in emergency events is seven minutes and 20 seconds.[35] Fire Station No. 2 would be the first to respond to the project site. It is predicted that their response time to the site would be within four to five minutes, which is within the response time goal.[36]

The City is divided into six different beats. The project site is located within Beat 2. The most frequent crimes in the City in 2004 include auto burglary, auto theft, and other larceny.[37] The police response time goal in emergency events is four minutes and 30 seconds.[38]

[35] Stivers, Mark. City of Sunnyvale Department of Public Safety. Personal Communications. 1 March 2005.
[36] Friz, Mark. City of Sunnyvale Department of Public Safety. Personal Communications. 2005-2006.
[37] Crime Analysis Unit, Sunnyvale Department of Public Safety. Sunnyvale Crimes (2003-2004). Table. 2 February 2005.
[38] Stivers, Mark. City of Sunnyvale Department of Public Safety. Personal Communications. 1 March 2005.

3.2 Schools

The project site is located within the Sunnyvale School District and the Fremont Union High School District. The students generated from this proposed project would likely attend San Miguel Elementary School, located at 777 San Miguel Avenue (approximately two miles east of the project site), Columbia Middle School, located at 739 Morse Avenue (approximately 2.5 miles northwest of the project site), and Fremont High School, located at 1279 Sunnyvale-Saratoga Road (approximately 4.5 miles southwest of the project site).

Based on Sunnyvale School District's student generation rate of 0.08-0.10 students per unit, the redevelopment of the site under the proposed GPA scenario would generate between 227-284 students. The two specific development projects would generate between 44 and 55 students in the near-term.[39] According to the Sunnyvale School District and the *School Facility Needs Study*, San Miguel Elementary School currently has capacity but will need expansion in the future, and Columbia Middle School is currently at capacity. The District has plans to increase capacity and upgrade the facilities at the San Miguel Elementary School and Columbia Middle School sites.[40]

Based on the Fremont Union High School District's current student generation rate of 0.01 students per multi-family attached residential unit, the redevelopment of the site under the proposed GPA scenario would generate approximately 28 high school students. Using this generation rate, the two specific development projects would generate approximately six (6) high school students in the near-term.[41]

The proposed GPA scenario would generate a substantial number of additional students in the Sunnyvale School District and the Fremont Union High School District. The accommodation of these additional students may require improvements and increases in capacity beyond those currently planned.

State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities as the payment of a school impact fee prior to the issuance of a building permit. The project applicants would pay Sunnyvale School District's school impact fee of $1.27 per square foot and Fremont High School District's school impact fee of $0.86 per square foot for the proposed project. The school districts are responsible for implementing the specific methods for mitigating school impacts under the Government Code. The school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would partially offset the costs of serving the project-related increase in student enrollment.

Implementation of the proposed General Plan Amendment would incrementally increase the number of school children in the project area. This would result in increases in school children attending the public schools identified above. State law requires that impacts to schools are mitigated through payment of fees. Development associated with the proposed land use designation would not result in the need to construct a new school.

---

[39] Dr. Benjamin Picard. Deputy Superintendent. Sunnyvale School District. Personal Communications. 2006.
[40] Dr. Benjamin Picard. Deputy Superintendent. Sunnyvale School District. Personal Communications. 2006.
[41] Shelby Spain. Director – Guidance and Community College Programs. Fremont Union High School District. Personal and Written Communications. September-October, 2006.

Development associated with the proposed GPA scenario would comply with the school impact requirements of the City of Sunnyvale. Development is not anticipated to result in significant physical impacts on local schools.

3.3 Parks and Recreation

The City of Sunnyvale provides parklands, open space, and community facilities for public recreation and community services. The City has a total of 838.47 acres of open space, 694.97 acres of which is City maintained and available for public use. The remaining 143.50 acres are either sites that are neither maintained nor programmed by the City's Parks and Recreation Department, or are facilities that are privately operated and not open to the public for general use. A summary of City open space is provided in Table 25. The nearest park to the project site is Fair Oaks Park, a 15.28-acre park located west of the site. The only other public park in the site area is Fairwood Park, a 1.93 acre park located north of US 101.

The 1986 Open-Space Sub-Element of the General Plan notes the National Recreation and Park Association (NRPA) standards and guidelines, which recommend a park system, at a minimum, be composed of 6.25 to 10.5 acres of developed open space per 1,000 population. The City is currently updating the Open Space Sub-Element to exclude properties that are not within the jurisdiction of the City to program or maintain, such as Twin Creeks Sports Complex, a 50-acre site that is privately operated, and school properties, which the City does not maintain nor have any jurisdiction over. Using these standards of open space, there are 5.3 acres of open space per 1,000 people in Sunnyvale, which is short of the range advocated by NRPA.

The proposed project is estimated to increase population by 7,105 people. Including the future residents of the proposed project, the City would still fall short of the suggested NRPA range for recreational open space and the project would incrementally increase demand for parks in the area; however, the project includes the potential development of approximately 10 acres of public park land on the site, as well as private recreation and open space areas. If parks are not provided, the project will be required to pay the City Park In-Lieu Fees per residential housing unit.[42] This fee is paid at the time of final map recording.

3.4 Library Services

The City of Sunnyvale is served by the Sunnyvale Public Library. The Sunnyvale Public Library is located at 665 West Olive Avenue, approximately five miles northeast of the project site. The Sunnyvale Public Library is a community space where the public has access to a vast diversity of ideas, information, knowledge and entertainment. The library provides resources, such as books and digital video discs (dvds), for patrons to borrow. Library services may also be accessed online via the Library's website, where users may browse, search and place holds on items in the Library's collections, download electronic books and audiobooks, take online practice tests, and find the information they need from a variety of special online databases. The Library provides programs and classes for children, teens, and adults.

[42] The park in-lieu fee is subject to change.

The project would incrementally increase demand for library services. However, given the size of the project, it is not anticipated to require the construction of new libraries. It should be noted that the City of Sunnyvale is currently in the process of developing a plan for the future of the Sunnyvale Public Library, by studying the community's library needs in order to effectively provide library services and facilities over the next 20 years.

TABLE 25:
CITY OPEN SPACE INVENTORY

City Owned			**Total Acres**
Neighborhood Parks	Braly Park Cannery Park DeAnza Park Encinal Park Fair Oaks Park Fairwood Park Greenwood Manor Lakewood Park Las Palmas Park	Murphy Park Orchard Gardens Park Ortega Park Panama Park Ponderosa Park Raynor Park San Antonio Park Serra Park Victory Village Park Washington Park	
			Total 158.25
Trails	JWC Greenbelt		
			Total 12.25
Special Use Parks/Facilities	Plaza del Sol Community Center Civic Center Campus	Orchard Heritage Park Sunken Gardens Golf Course Sunnyvale Municipal Golf Course Three Points Corner	
			Total 223.84
City Maintained			
Regional Parks	Baylands Park **(72 acres are developed)**		
			Total 177.00
City Maintained School Athletic/ Play Fields	Braly School Bishop School Cherry Chase School Cumberland School Cupertino Jr. High DeAnza School Ellis School Fairwood School Hollenbeck School	Lakewood School Nimitz School Ponderosa School San Miguel School Serra School Stocklmeier School Sunnyvale Middle School Vargas School West Valley School	
			Total 117.82
OTHER NON-CITY SITES (not included in City's Open Space Inventory)			
Athletic/Play Fields	Fremont High School Patrick Henry Peterson Middle School	Sunnyvale High School Twin Creeks Sports Complex - (privately operated)	
			Total 135.5

4. GROWTH-INDUCING IMPACTS

This EIR evaluates an amendment to the City of Sunnyvale's adopted General Plan Map. The CEQA Guidelines require that an EIR identify the likelihood that a proposed project could "foster" or stimulate "...economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" [§15126.2(d)]. This section of the EIR is intended to evaluate the impacts of such growth in the surrounding environment.

The redesignation of any property in a General Plan, by definition, allows for some form of new development. Development of the project site in conformance with the proposed land use designation will be "growth." The proposed land use designation would allow for residential and commercial development on a site that currently is not designated for residential development. This growth on the site, however, would not be "induced" by the proposed project - it is the proposed project.

There is an existing shortage of available housing in Santa Clara County, particularly affordable ownership housing. This shortage is reflected in high rental vacancy rates, rising housing prices, and the congestion associated with commuting from outside the County. The redesignation of the project site from *Industrial* to *Industrial-to-Residential (ITR)* will permit the construction of more residential units than are currently allowed in Sunnyvale. To the extent that these units are occupied by people who move to Santa Clara County from outside the County, this is new growth. To the extent that these units are occupied by people who are sharing dwelling units or who are commuting to Santa Clara County from elsewhere, they may not be considered economic or population growth as described in Section 15126.2(d) of the CEQA Guidelines.

Changing the land use designation on the project site to allow for residential uses could create pressure on nearby commercial and office uses, particularly those to the south of the site, to convert to residential land uses. However, the proposed General Plan land use designation change will not allow new development where development is not already allowed and will not substantially increase the need for urban infrastructure. The project itself explicitly allows more dwelling units within Sunnyvale than are planned for the existing General Plan, but these additional units are the direct result and goal of the proposed project, not induced or indirect growth.

As discussed above, changing the land use designation on the project site from *Industrial* to *Industrial-to-Residential (ITR)*: (1) will not induce growth in an area where urbanization is not already planned, (2) will not create a precedent for growth outside the existing urban envelope, and (3) will not create a significant demand for new infrastructure in an area where urban infrastructure does not already exist.

IMPACT GROWTH-1: Based on the above discussion, the proposed project would not result in significant growth-inducing impacts. (Less Than Significant Impact)

5. CUMULATIVE IMPACTS

Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. The CEQA Guidelines state (§15130) that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the potential impacts which might result from approval of past, present and reasonable foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

The Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present and probable future projects or a summary of projections from an adopted general plan or similar document. This EIR addresses both a General Plan amendment and rezoning as well as two specific development projects. The cumulative impacts discussion builds on the analysis and projections in the previously adopted Sunnyvale General Plan because this would provide the overall long term cumulative impacts of the project.

The discussion below address two aspects of cumulative impacts: 1) would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question? And, if that cumulative impact is likely to be significant, 2) would the contributions to that impact from the project which is the subject of this EIR, implementation of the proposed Industrial-to-Residential (ITR) General Plan amendment project, make a cumulatively considerable contribution to those cumulative impacts?

Given that the project proposes both a General Plan amendment and two specific development projects, which could contribute to cumulative impacts, relevant cumulative projects would include other pending General Plan amendments and other development projects in the site area. The following table identifies all the pending, approved, and recently completed projects, including currently pending General Plan amendments which, in combination with the proposed GPA, were evaluated in this cumulative analysis (see Table 26).

A total of 28 projects, including the two proposed development projects, were identified and evaluated for cumulative impacts. Several of these cumulative projects are located north of town, or within the Moffett Park area. Many of the cumulative projects are located within other approved *Industrial-to-Residential (ITR)* areas in the City, which were designated as part of the *1993 Futures Study* (ITR Areas 4, 5, and 7). The City's purpose in changing General Plan designations on property at a particular point in time is generally to guide future redevelopment (which may or may not be imminent), and to establish a suitable context for the development of appropriate infrastructure.

TABLE 26:
CUMULATIVE PROJECT LIST

Status of Projects:
Pending: A project is considered to be pending after a completed application has been submitted and before an action has been taken. Approved: Approved projects are ones that have been reviewed and approved by the Planning Division but have not yet been issued building permits. Under Construction: A project under construction has been reviewed and approved by the Planning Division and Building Permits have been issued. Completed: A project is considered to be complete after the final building permit inspection is approved.

COMMERCIAL

APPROVED	ADDRESS	APPLICANT	COMMON NAME/ DESCRIPTION
2005-1048	595 Lawrence Ex.	Jeffrey Morris	New 22,682 sq. ft. commercial shopping center in an M-S Zoning District. Approved 4/06.
2005-0413	782 E. El Camino Real	San Mateo CPP Investors	WALGREENS: A new 19,200 sq. ft. retail building in a C-2/ECR Zoning District. Approved 7/05.
2004-0576	2502 Town Center Ln.	Fourth Quarter Properties	TOWN CENTER MALL: Redevelopment of Town Center Mall – Proposed 292 residential units, 16-screen movie theater, 275,000 sq. ft. of office space and 1,000,000 sq. ft. of total retail in DSP Block 18 Zoning District. Approved 8/04.

INDUSTRIAL

PENDING	ADDRESS	APPLICANT	COMMON NAME/ DESCRIPTION
2005-1198	1111 Lockheed Martin Way	Jay Paul Company	JAY PAUL: Development of 50 acres of land with 7 buildings plus an amenity building and four parking structures for a total of 1,582,473 sq. ft.
APPROVED	**ADDRESS**	**APPLICANT**	**COMMON NAME/ DESCRIPTION**
2005-0033	1165 E. Arques Ave.	Jack May	A new 98,200 sq. ft. self-storage facility in the M-S Zoning District. Approved 2/05.
2005-0778	901 Thompson Pl.	T2 Architecture Group	New 3-story mini-storage (self-storage) facility totaling 199,155 sq. ft. with a 45% FAR. Approved 10/05.
2005-0340	495 Java Dr.	Network	NETWORK APPLIANCE: Master Plan for 5 new R&D buildings, 1

		Appliance	amenity (café & fitness) building, and 3 multi-level parking structures resulting in a total of 1,375,978 sq. ft. of building and 4,413 parking spaces. Approved 6/05.

RESIDENTIAL

PENDING	ADDRESS	APPLICANT	COMMON NAME/ DESCRIPTION
2006-0610 *(Part of Project)*	1044 E. Dunne Ave.	Taylor Woodrow Homes	250 condominium units (60 townhouses and 190 flats) located in the Duane ITR Study Area that is pending decision on the General Plan Amendment by the City Council. (Currently the M-S Zoning District).
2006-0598 *(Part of Project)*	962 E. Duane Ave.	The Riding Group	242 townhouse units located in the Duane ITR Study area that is pending decision on the General Plan Amendment by the City Council. (Currently the M-S Zoning District).
APPROVED	**ADDRESS**	**APPLICANT**	**COMMON NAME/ DESCRIPTION**
2006-0069	1168 Aster Ave.	KB Homes	80 condominium units in an MS/ITR/R-3/PD Zoning District. Approved 6/06.
2005-1185	698 E. Taylor Ave.	The Olson Company	68 townhouses in an MS/ITR/R-3/PD Zoning District. Approved 6/06.
2006-0496	1170 Morse Ave.	Standard Pacific Homes	48 TOWNHOUSES on an M-S/ITR/R-3 Zoning District. Approved 6/06.
2006-0153	1049 Klel Ct.	Classic Communities	30 condominium flats and 4 townhouses units in an M-S/ITR/R-3/PD Zoning District. Approved 5/06.
2005-0646	488 Tasman Dr.	Pulte Homes	DANBURY IV: 43 townhouses in an MS/ITR/R-3/PD Zoning District. Approved 1/06.
2005-1020	108 S. Wolfe Rd.	Kier & Wright Engineers & Surveyors	130 townhouses within an MS/ITR/R-3/PD Zoning District. Approved 1/06.
2005-1157	1035 N. Fair Oaks Ave.	Classic Communities	JUNCTION OAKS: 30 town homes in an MS/ITR/R-3/PD Zoning District. Approved 1/06.
2005-0622	610 Alberta Ave.	Centex Homes	55 single-family homes in an R-2/PD Zoning District. Approved 10/05.
2004-0910	1250 Lakeside Dr.	Rob Steinberg	263 hotel units and 250 residential units with structured parking in a Site

			Specific Plan. Approved 9/05.
2005-0556	1038 Morse Ave.	430 Toyama LLC	PHASE 2 LYON ANS TIMOR TERRACE: 17 homes in an MS/ITR/R-3/PD Zoning District. Approved 9/05.
2005-0645	508 Tasman Dr.	Pulte Homes	DANBURY III: 30 townhouses in an MS/ITR/R-3/PD Zoning District. Approved 10/05.
2005-0643	1047 N. Fair Oaks Ave	Pulte Homes	DANBURY II: 36 townhouses and subdivision of one lot into 36 condo lots in an MS/ITR/R-3/PD Zoning District. Approved 10/05.
2005-0510	1156 Aster Ave.	John Travis	42 townhouses MS/ITR/R-3/PD Zoning District. Approved 8/05.
2005-0625	1122 Morse Ave.	Toll Brothers	VERONA: 72 townhouses and tentative map for 75 lots. Approved 8/05.
2004-0576	2502 Town Center Ln. 127 N. Sunnyvale Ave.	Fourth Quarter Properties	TOWN CENTER MALL: Proposed 292 residential units, 16-scren movie theater, 275,000 sq. ft. of office space and 1,000,000 sq. ft. of total retail in DSP Block 18 Zoning District. Approved 8/04.
UNDER CONSTRUC-TION	**ADDRESS**	**APPLICANT**	**COMMON NAME/ DESCRIPTION**
2004-0650	430 Toyama Dr.	430 Toyama LLC	LYON AND TIMOR TERRACES: 50 town homes in an MS/ITR/R-3/PD Zoning District. Approved 9/04.
2004-0531	624 E. Evelyn Ave.	Toll Brothers	BRITTON PLACE- EUCALYPTUS, FICUS, FRINGE TREE AND GINKO: TERRACES 47 town homes in a C-1/ITR/R3/PD Zoning District. Approved 10/04
2004-0603	545 E. Weddell Dr.	Toll Brothers	SUNNYVALE CITY PARK: 130 town homes in an MS/ITR/R-3/PD Zoning District. Approved 9/04.
2004-0365	635 E. El Camino Real	Deborah Ungo-McCormick	WOODFIN SUITES: 88 room hotel into condominium ownership units in a Medium Density Residential Zoning District.

Even if all of these cumulative projects are approved, the implementation of all these projects is unlikely to occur immediately. They are, however, likely to develop or redevelop during the current General Plan horizon. All of the development is assumed to occur consistent with other relevant General Plan policies. In some cases, that means some of the development or redevelopment may be delayed in the near term, until and unless capacity is available on the local or regional roadway system, and after necessary infrastructure is complete to serve new development.

Given the size of Sunnyvale's Sphere of Influence and the number and diversity of these pending General Plan amendments, and their location within the existing urban envelope, the issue areas for which cumulative impacts could be significant include: land use, transportation, noise, air quality, and biological resources. These cumulative impacts are addressed in greater detail below. Some individual General Plan amendments may have significant impacts on other issues (*i.e.*, water quality), but the specifically proposed General Plan amendment evaluated in this EIR would not result in cumulatively considerable significant impacts on those particular resources.

5.1 Cumulative Land Use Impacts

5.1.1 Thresholds of Significance

Consistent with the thresholds used by the City in evaluating project-specific land use impacts, this analysis examines whether development of the cumulative projects on the list could result in the following types of land use impacts:

- Land use conflicts from placing incompatible land uses in proximity to each other. This can occur when industrial uses are constructed in an area of primarily residential development and vice versa, or when residential uses are constructed in proximity to freeways, railroad alignments, or airports. These land use conflicts can include:
  - long-term and short-term (construction-related) noise and dust generation;
  - hazardous materials use and/or contamination; and
  - traffic intrusion/spillover.
- Loss of agricultural lands, including prime farmlands;
- Population and housing growth that is inconsistent with the General Plan; and
- Loss of open space.

5.1.2 Land Use Compatibility

Many of the cumulative projects listed in Table 26 would place new residential development and other sensitive uses near existing industrial uses. Future residents in the developments proposed may experience occasional disturbance and annoyances from spillover effects from existing industrial uses. Complaints about equipment, parking, lighting, nighttime operations, dust and litter, may result in limitations on these industrial businesses.

Each proposed project will be required to include design guidelines and setbacks between the existing (and future) industrial development and the new residential and commercial development, in order to minimize the potential for conflicts between industrial and residential land uses. In addition, each project would specifically be reviewed and required to adhere to the City's *Industrial Design Guidelines* and *Citywide Design Guidelines*. Any new or expanded industrial development would also adhere to the City's *Industrial Design Guidelines*. The setback, design, and operational requirements of the Municipal Code and Citywide Design Guidelines, should minimize both the severity and the frequency of such

complaints. For this reason, the cumulative projects would not result in significant cumulative land use compatibility impacts.

CUMULATIVE IMPACT LU-1: The project would not contribute to significant cumulative land use compatibility impacts. (Less Than Significant Cumulative Impact)

5.1.3 Loss of Agricultural Lands

This EIR discusses the proposed project's impacts on farmland and concludes that approval of the project as it is proposed, "would not result in the loss of prime agricultural land." Since approval of the project as it is proposed would not result in the loss of any prime agricultural land, it would not contribute to a cumulatively significant loss of prime agricultural land.

CUMULATIVE IMPACT LU-2: The project would not contribute to a significant impact to prime agricultural land. (No Cumulative Impact)

5.1.4 Population and Housing

The cumulative effect of approving all of the pending projects listed in Table 26 would be to increase the number of dwelling units in the City by approximately 2,326 units, including the two proposed development projects. Most of the additional dwelling units would be developed at higher densities on infill sites near or adjacent to existing infrastructure and existing or planned transit facilities.

There is an existing shortage of available, ownership housing within the City of Sunnyvale, particularly affordable housing. This shortage is reflected in low rental vacancy rates, rising housing prices, and the congestion associated with commuting from outside the City and County. The redesignation of urban land for residential uses will permit the construction of more residential units than is currently allowed in Sunnyvale, which would improve the City's existing jobs/housing imbalance. For these reasons, the cumulative projects would not result in significant population and housing impacts.

CUMULATIVE IMPACT LU-3: The project would not contribute to significant cumulative population and housing impacts. (Less Than Significant Cumulative Impact)

5.1.5 Loss of Open Space

All of the pending projects are on property which is already designated for urban land uses, and all are within the City's Urban Service Area. All of the sites are developed now, or have been developed in the past. The overall ITR project, which is proposed on a site that has been developed with existing industrial uses for many years, would not contribute to a significant cumulative loss of open space. The proposed development project on the AMD property would result in a loss of approximately 14 acres of lawn and landscaped open space on the site. Given the small size of this property and the fact that it is surrounded by industrial and residential development, this is not considered a cumulatively considerable loss of open space.

CUMULATIVE IMPACT LU-4: The project would not significantly contribute to a cumulatively considerable loss of open space. (Less Than Significant Cumulative Impact)

5.2 Cumulative Transportation Impacts

5.2.2 Thresholds of Significance

For the purposes of this cumulative analysis, if one or more of these thresholds is exceeded, the proposed cumulative projects would have cumulatively significant adverse impacts.

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or City of Sunnyvale for designated roads or highway; or
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks; or
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., from equipment); or
- Result in inadequate emergency access; or
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

5.2.3 Future Growth Intersection Analysis

Traffic volumes under future growth conditions were estimated by applying an annual growth rate of 1.8 percent to the existing volumes, then adding the trips from approved developments and the proposed project trips. The future growth factor was calculated by comparing 2025 baseline traffic volumes to existing counts. The 2025 volumes were taken from the CCS Planning and Engineering *Comprehensive Expressway Planning Study*.

Depending on the circumstances of each individual project, including size and location, the cumulative analysis may conclude that one or more individually proposed projects would contribute substantially to significant cumulative impacts, or that none of the individually proposed amendments would make a more meaningful contribution to the cumulative impacts than any other.

All of the pending development projects listed in Table 26 will, to varying degrees, add additional traffic trips to the roadway network throughout the City of Sunnyvale. Since approval of the project as it is proposed would not result in significant traffic and circulation impacts, the project would not contribute to cumulatively significant traffic and circulation impacts.

CUMULATIVE IMPACT TRANS-1: The project would not contribute to cumulatively significant traffic and circulation impacts. (Less Than Significant Cumulative Impact)

5.3 Cumulative Noise Impacts

5.3.1 Thresholds of Significance

For the purposes of this cumulative analysis and consistent with the thresholds used by the City in evaluating cumulative noise impacts from development projects, if one or more of these thresholds is exceeded, the proposed projects would have cumulatively significant adverse impacts.

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; or
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

While CEQA does not specifically define what amount of noise level increase is considered significant, the City of Sunnyvale defines a significant noise impact from new development on existing land uses if: 1) the existing noise level on the site is normally acceptable and the proposed project would increase the existing, normally acceptable noise level by more than five dBA, but the noise level is still normally acceptable; 2) the existing noise level on the site is normally acceptable and the proposed project would increase the noise level by more than three dBA and the noise level exceeds the normally acceptable levels, or 3) the existing noise level on the site exceeds normally acceptable levels and the proposed project increases the noise level by more than three dBA.

As described at the beginning of this *Cumulative Impacts* Section, the cumulative project sites are located throughout the urbanized City of Sunnyvale. The existing noise environment of the area is defined by typical urban activities with transportation activities being the single greatest contributor to overall noise.

Noise levels along freeways, expressways, arterials and other streets result from a combination of traffic volumes, speed of the vehicles, and type of vehicles (*i.e.*, percentage of heavy trucks). These variables have differing effects upon sound levels; for example, sound levels may actually be lower with higher volumes of traffic if the traffic is moving slowly in heavily congested conditions. A 26 percent increase in traffic volume will increase sound levels by one decibel if the speed remains constant. An increase of three decibels or greater is required to be perceived by the human ear; as a general rule, traffic volumes on a given

roadway must double to cause a three decibel increase in noise levels, assuming speeds remain constant.

The cumulative projects being considered in Sunnyvale will result in the types of noise-related impacts described below.

5.3.2 Impacts from Ambient Noise Levels

At various locations, it is proposed that noise-sensitive land uses (*e.g.*, residences) would be constructed on sites where existing noise levels exceed City General Plan Noise/Land Use Compatibility standards. Such locations are typically those adjacent to railroads, arterials, expressways, and freeways, and beneath or near aircraft flight paths.

Where noise-sensitive uses are proposed at locations with elevated ambient noise levels, such impacts are typically mitigated through the use of noise-reducing building materials (*e.g.*, noise-rated windows, insulation, etc.) and through site design (*e.g.*, setbacks, sound walls, placing outdoor use areas in areas that are shielded from roadway noise, etc.). The City requires that the specific building design measures be identified during the design review process. The design and inclusion of the mitigation measures for attached residential uses is also verified in conformance with State law prior to issuance of building permits. Existing laws and policies will ensure that interior noise levels meet relevant standards. For these reasons, the cumulative projects would not be subject to significant noise impacts from ambient noise levels.

CUMULATIVE IMPACT NOISE-1: The proposed project would not result in a significant contribution to cumulative noise impacts from ambient noise levels. (Less Than Significant Cumulative Impact)

5.3.3 Impacts to Nearby Uses from Cumulative Project Traffic

Traffic associated with cumulative development will increase noise along many roadways in the greater Sunnyvale area. Given the high existing traffic volumes on the roadways in the area, the noise increase resulting from dispersal of these additional trips would not be significant along roadways where existing volumes are high (e.g., freeways, expressways, and most existing arterials).

CUMULATIVE IMPACT NOISE-2: The proposed project would not result in a significant contribution to cumulative noise impacts from increased traffic on surrounding roadways. (Less Than Significant Cumulative Impact)

5.3.4 Cumulative Construction Noise

The construction of these cumulative projects would result in short-term noise and disturbance at various locations throughout the City. However, these cumulative project sites are scattered throughout the City, and their schedules for construction are different and are likely to occur over the timeframe of the next several years. In addition, construction noise mitigation measures are typically included as part of each project, especially large development and public projects. Given these factors, and the fact that all construction projects are temporary, the cumulative construction noise associated with the pending projects is not anticipated to result in significant impacts. The proposed project includes measures to offset its construction noise impacts, and therefore, would not significantly contribute to cumulatively considerable short-term construction noise impacts.

CUMULATIVE IMPACT NOISE-3: The project would not significantly contribute to cumulatively considerable temporary construction noise impacts. (Less Than Significant Temporary Cumulative Impact)

5.4 Cumulative Air Quality Impacts

5.4.1 Clean Air Plan

In order to satisfy the requirements of both State and Federal legislation, the Bay Area Air Quality Management District (BAAQMD) prepared a Clean Air Plan (CAP) that is based on quantified analysis. This analysis includes an estimate of the amount of air pollution that will be generated by various sources, especially vehicular traffic. The estimates of traffic are based on the General Plans for all of the jurisdictions within the BAAQMD's air shed.

The CAP also identifies what measures will be implemented to reduce the pollution to levels that are consistent with the State and Federal laws during the mandatory time frames (*i.e.*, by the designated target date). The mitigations include upgraded engines and fuels, along with the planning policies required to be in cities' general plans to achieve CAP conformance.

As discussed in Section *2.7 Air Quality* of this EIR, BAAQMD identifies thresholds of significance to be used in evaluating the likely air quality impacts from proposed general plan amendments. If a project is consistent with the population projections in the version of the General Plan that was used to prepare the CAP, then it can be assumed that the project will not result in long term air quality impacts that cannot be mitigated through implementation of the mitigation measures that are in the CAP and in the General Plan.

If growth in population is greater than assumed in the CAP emission inventory, then population-based emissions also are likely to be greater than assumed in the CAP and the analysis done for the CAP is not relevant. Consequently, attainment of the State air quality standards could be delayed, the project is inconsistent with air quality planning for the region, and will have a significant air quality impact.

5.4.2 Thresholds of Significance

Consistent with the thresholds used by BAAQMD, this analysis evaluates whether the cumulative projects are consistent with the adopted CAP or could result in a significant air quality impact.

5.4.3 Cumulative Air Quality Impacts

The City of Sunnyvale currently has more jobs than housing: people working in Sunnyvale commute from neighboring cities because of the shortage of housing in the City. The cumulative projects would provide Sunnyvale employees residing in other communities within the Bay Area and outlying areas with more local housing. It can be concluded, therefore, that commute lengths and vehicle miles traveled could be incrementally reduced by the proposed project and the cumulative projects, and therefore, these projects could have a beneficial impact on air quality. However, the proposed project, in conjunction with the cumulative projects, would add housing that is not accounted for in the City's General Plan or the CAP, and would therefore technically be inconsistent with the assumptions in the CAP. While the proposed project site, due to its location, would not contribute substantially to increased vehicle miles traveled, it does contribute to the cumulative increase in population beyond the CAP values. According to BAAQMD Guidelines, the proposed project in combination with all of the other pending General Plan amendments would be inconsistent with the CAP, and would result in a significant adverse cumulative impact to regional air quality.

The cumulative effect of approving and implementing all proposed General Plan amendments would be to add units not included in the CAP, which would result in cumulatively significant increases in traffic congestion in the area. The proposed land use amendment for the project site would contribute to the cumulatively considerable impacts on regional air quality. (Significant Cumulative Impact)

CUMULATIVE IMPACT AQ-1: **The cumulative effect of approving and implementing all proposed General Plan amendments would be to add units not included in the CAP, which would result in cumulatively significant increases in traffic congestion in the area. The proposed land use amendment for the project site would contribute to the cumulatively considerable impacts on regional air quality. (Significant Cumulative Impact)**

5.4.4 Short-Term Cumulative Air Quality Impacts

Construction activities associated with all the pending projects would temporarily affect local air quality. Construction activities such as demolition, earthmoving, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality. However, as mentioned above, these cumulative project sites are scattered throughout the City, and their schedules for construction are different and are likely to occur over the timeframe of the next several years. In addition, construction mitigation measures are typically included as part of each project, especially large development and public projects. Given these factors, and the fact that all construction projects are temporary, the cumulative short-term air quality impacts associated with the pending projects are not anticipated to be significant. The proposed project includes measures to offset its construction impacts, and therefore, would not significantly contribute to cumulatively considerable short-term construction air quality impacts.

CUMULATIVE IMPACT AQ-2: The project would not significantly contribute to cumulatively considerable temporary air quality impacts. (Less Than Significant Temporary Cumulative Impact)

5.5 Cumulative Biological Resources Impacts

5.5.1 Thresholds of Significance

Consistent with the thresholds used by the City in evaluating project-specific biological impacts, a cumulative impact to biological resources is considered significant if the proposed project, in conjunction with other pending projects, would have a substantial adverse effect, either directly or through habitat modification, on any special status species or sensitive biological habitat.

5.5.2 Cumulative Impacts to Sensitive Plant and Animal Species

All of the cumulative project sites are currently developed and provide minimal to no habitat for special status species. As described in *Section 2.4 Biological Resources*, while there is a potential for burrowing owls and nesting raptors to occur on the AMD Riding Group project site, the project, with incorporation of the mitigation identified, would not result in impacts to individual special status plants or animals or their habitat. Therefore, it would not contribute to a cumulatively significant impact to these species.

CUMULATIVE IMPACT BIO-1: The project would not contribute to cumulative impacts to special status species or their habitat. (Less Than Significant Cumulative Impact)

5.5.3 Cumulative Impacts to Trees

The City of Sunnyvale Tree Preservation Ordinance defines a tree of significant size as any woody plant which has a trunk of 38 inches or greater in circumference, measured at four feet above the ground. A tree removal permit is required from the City for the removal of any significant size trees. Each of the cumulative projects would be required to mitigate the removal of mature/significant-sized trees. As described above, the cumulative project sites are scattered throughout the City, and their schedules for construction (and therefore, tree removal and replacement) are different and are likely to occur over the timeframe of the next several years. For these reasons, the pending projects are not anticipated to result in a significant cumulative loss of mature trees.

CUMULATIVE IMPACT BIO-2: The project would be required to mitigate the loss of mature trees on the site and would not contribute to a cumulative significant loss of mature trees throughout the City. (Less Than Significant Cumulative Impact)

5.6 Cumulative Utilities and Service Systems Impacts

Approval and full implementation of the cumulative projects listed in Table 26, in conjunction with the buildout of the City's current General Plan, would result in the construction of new industrial, commercial, and residential development. Each of these uses would have different impacts upon the City's utility and service systems. Utility and service providers maintain long-term projections for demand for their services with the City based on the City's General Plan, and in many cases have developed strategies to meet the anticipated demand levels.

5.6.1 Thresholds of Significance

For the purposes of this project, a cumulative impact to utility and service system resources is considered significant if the proposed project, in conjunction with the other pending projects, would exceed the current or feasible future capability of the relevant utility or service system.

5.6.2 Cumulative Impacts to Water, Sewer, Storm Drain, Solid Waste, and Electricity and Natural Gas Services

Implementation of the cumulative projects would result in additional demand upon utilities and service systems. Each project would be required to conform to the goals and policies in the City's Environmental Management Sub-Element of the General Plan regarding water resources, sanitary sewer system, surface runoff, solid waste management, and energy. The projects will also be required by the City to mitigate their project impacts as part of the development review process (refer to Section *2.11 Utilities and Services*). For these reasons, the cumulative projects, in conformance with the goals and policies in the Environmental Management Sub-Element and with the implementation of standard project specific mitigation measures, are not anticipated to result in significant cumulative impacts to utilities and services.

CUMULATIVE IMPACT UTIL-1: The project would conform to the City's goals and policies regarding water resources, sanitary sewer system, surface runoff, solid waste management, and energy. The project would also implement the mitigation measures identified in *Section 2.11 Utilities and Service Systems* to reduce solid waste generation and impacts to the water and sewer systems. For these reasons, the project would not result in a significant unmitigated impact to utilities or service systems or substantially contribute to a cumulative impact on utilities or service systems. (Less Than Significant Cumulative Impact)

6. SIGNIFICANT, UNAVOIDABLE IMPACTS

The project would result in the below significant or unavoidable impacts. All other impacts of the proposed project would be mitigated to a less than significant level with incorporation of applicable General Plan policies and actions and the project-specific mitigation measures identified in this EIR.

Regional Air Quality: The long-term GPA scenario, however, would generate an increase in emissions exceeding the thresholds of significance for reactive organic gases. Therefore, the proposed GPA scenario would have a significant unavoidable long-term impact on regional air quality.

Cumulative Regional Air Quality: The cumulative effect of approving and implementing all proposed General Plan amendments would be to add units not included in the CAP, which would result in cumulatively significant increases in traffic congestion in the area. The proposed land use amendment for the project site would contribute to the cumulatively considerable impacts on regional air quality.

7. ALTERNATIVES TO THE PROJECT

7.1 INTRODUCTION

The CEQA Guidelines give extensive direction on identifying and evaluating in an EIR alternatives to a proposed project [§15126.6]. The purpose of having alternatives in an EIR is to identify ways to substantially lessen or avoid the significant effects that a proposed project may have on the environment. The range of alternatives selected for analysis is governed by the "rule of reason," which requires the EIR to discuss only those alternatives necessary to permit a reasoned choice. Although the alternatives do not have to meet every goal and objective set for the proposed project, they should "feasibly attain most of the basic objectives of the project."

The discussion of alternatives should include enough information to allow a meaningful evaluation and comparison with the proposed project. The Guidelines state that if an alternative would cause one or more additional impacts, compared to the proposed project, the discussion should identify the additional impact, but in less detail than the significant effects of the project.

The three critical factors to consider in selecting and evaluating alternatives are, therefore, (1) the significant impacts from the proposed project which could be reduced or avoided by an alternative, (2) the project's objectives, and (3) the feasibility of the alternatives available. Each of these factors is discussed below.

7.1.1 Significant Unavoidable Impacts

As mentioned above, the CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and would achieve most of the project objectives. As discussed previously in this EIR, the project has significant unmitigated or unavoidable impacts on regional air quality and cumulative air quality.

Alternatives may also be considered if they would further reduce impacts that are already less than significant because the project is proposing mitigation. Impacts that would be significant, but for which the project includes mitigation to reduce them to less than significant levels, include , drainage and water quality impacts, biological resources, traffic and circulation, noise, utilities and services, and impacts from construction. In addition, alternatives to reduce the project's less than significant land use compatibility impacts may also be considered.

CEQA encourages consideration of an alternative site when significant effects of the project might be avoided or substantially lessened. Only locations that would avoid or substantially lessen any of the significant effects of the project and meet most of the project objectives need be considered for inclusion in the EIR.

7.1.2 Objectives of the Project

While CEQA does not require that alternatives must be capable of meeting all of the project objectives, their ability to meet most of the objectives is considered relevant to their consideration. As stated in Section *1.4 Objectives of the Project*, the objective of the proposed General Plan land use change is to allow for a mix of uses on the site, including the existing industrial and commercial uses, and to designate the site as appropriate for transition to residential use, in order to increase the housing stock in Sunnyvale.

The specific development projects are proposed to increase the value of the properties by developing economically viable, high-quality residential units with a diversity of product types and potential areas for future parks, in proximity to existing neighborhoods, existing and planned employment centers, and community services and amenities, as well as to help meet the need for housing in Sunnyvale.

7.1.3 Feasibility of Alternatives

CEQA, the CEQA Guidelines, and the case law on the subject have found that feasibility can be based on a wide range of factors and influences. Among the factors that may be taken into account in considering the feasibility of an alternative are "...site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries...and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site...." [§15126.6 (f)(1)]

7.1.4 Selection of Alternatives

In addition to "No Project," the Guidelines advise that the range of alternatives discussed in the EIR should be limited to those that "would avoid or substantially lessen any of the significant effects of the project" [§15126.6(f)]. The project's impacts on traffic and air quality are directly related to the amount of development proposed. If the amount of additional development added to the site is reduced, both traffic and air quality impacts will decrease in direct proportion to the reduction in size. The discussion below addresses two reduced development alternatives: one that would reduce the proposed densities on the site (the "Reduced Density Alternative"), and another that would develop a smaller portion of the site (the "Smaller Site Alternative"). Another alternative that would provide flexibility for the future location of parks and open space throughout the site is the "Floating Park Alternative" discussed below. In addition, an alternative land use and alternative locations for the project are also evaluated.

7.2 NO PROJECT ALTERNATIVE

The Guidelines specifically require consideration of a "No Project" Alternative. The purpose in including a No Project Alternative is to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. The Guidelines specifically advise that the No Project scenario is "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." The Guidelines emphasize that an EIR should take a practical approach, and not "...create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment" [§15126.6(e)(3)(B)].

Since the project site is currently developed with a variety of industrial uses, the "No Project" Alternative would likely include the continued operation of those uses, and potentially the redevelopment of certain parcels with newer industrial uses. Given the age and condition of some of the existing buildings and facilities on the site, if the General Plan land use designation and zoning were to remain the same, it is likely that the some of the current or future owners will wish to upgrade the existing buildings and facilities.

The site is currently developed with approximately 1,486,879 square feet of industrial uses. Under the current General Plan and zoning designation, the site could be redeveloped with a building or buildings totaling up to 1,981,980 square feet , with a maximum allowed building height of 75 feet (eight stories).[43]

7.2.1 Comparison of Environmental Impacts

The No Project Alternative would avoid all the environmental impacts of the project, assuming the continued operation of the existing industrial uses on the site. In this scenario, the project's significant air quality impacts would be avoided. In addition, the project's significant (but mitigated) long-term traffic and sanitary sewer impacts would be avoided. The less than significant land use compatibility, hazardous materials, visual impacts, short-term construction noise, and impacts to trees and biological resources would also be avoided.

It should be noted that under the No Project Alternative, all or portions of the ITR site could be redeveloped with other industrial uses, without amending the City's General Plan. Under the existing designation, all or portions of the site could be redeveloped with a variety of industrial uses, including offices, research and development, product assembly, and warehousing. Redevelopment of the site under the existing General Plan designation would avoid the land use compatibility, hazardous materials, and noise exposure impacts. Redevelopment of industrial uses on the site could result in similar visual and aesthetic impacts as the proposed uses, as well as short-term construction impacts similar to the proposed project.

7.2.2 Relationship to Project Objectives

Because this alternative would not allow for residential uses on the site, this alternative would not meet the project objectives, which include allowing for an increase in available high-quality residential development in Sunnyvale.

7.2.3 Conclusion

The No Project Alternative would avoid the significant air quality impacts of the project, as well as the less than significant land use compatibility, hazardous materials, visual, noise, biological, and construction impacts of the project. While the No Project Alternative could avoid or substantially reduce the identified environmental impacts of the proposed project, it would not meet any of the project objectives.

[43] This is based on approximately 130 acres (or 5,662,800 square feet) at 0.35 Floor Area Ratio.

7.3 REDUCED DENSITY ALTERNATIVE

A Reduced Density Alternative to the project as proposed would be a lower density residential development, allowing for less intense residential uses on the site. The Reduced Density Alternative assumes designations of R-2 and R-3 on the site, rather than R-3 and R-4 as proposed under the project scenario (see Figure 16). Under this alternative, the maximum number of residential units would be 1,570 (or 55 percent) of the 2,842 units under the proposed project scenario. With this lower number of units at lower densities, it is possible that the unit types would be different, at least on portions of the site. For example, at a lower overall density, more small-lot single-family detached and/or garden apartment and/or townhouse units could be built on the site.

7.3.1 Comparison of Environmental Impacts

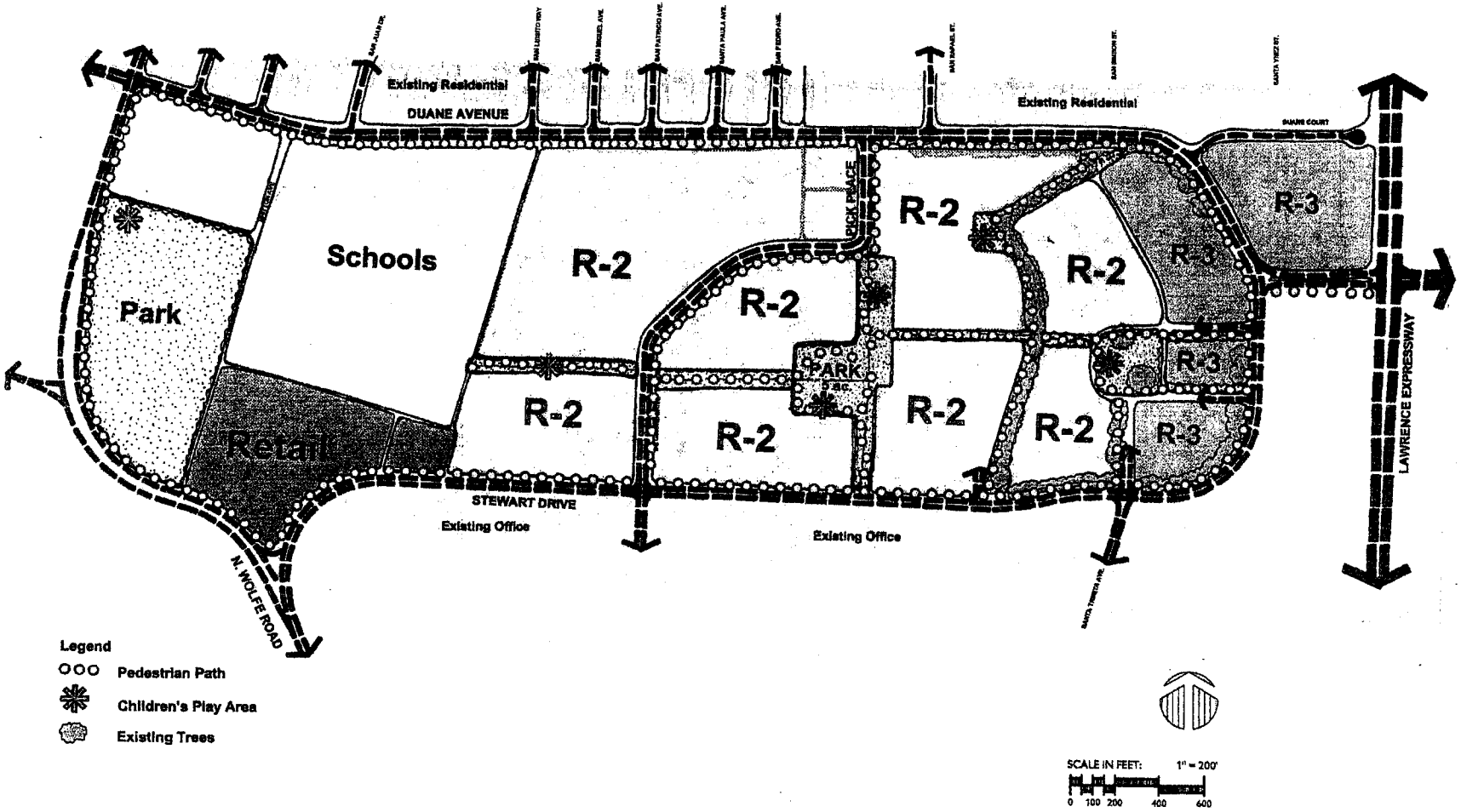
The Reduced Density Alternative would reduce the amount of traffic generated on the site, roughly by 45 percent, thereby reducing some of the significant (but mitigated) traffic impacts to the surrounding area. After subtracting out the traffic currently being generated by the existing light industrial uses which would be replaced on the site, the Reduced Density Alternative would generate approximately 3,329 net fewer daily traffic trips, with 1,721 fewer trips occurring in the AM peak hour and 1,012 fewer trips occurring in the PM peak hour, than the proposed GPA scenario. With this reduction in traffic trips, this alternative would avoid the significant (but mitigated) long-term traffic impacts at the Fair Oaks/Arques Avenue and the Stewart Drive/Duane Avenue intersections (refer to Chapter 5 and Table 8 of Appendix F).

The regional air quality impacts associated with the traffic would also be reduced proportionally with fewer vehicle trips. The regional air pollutants produced by project traffic would still substantially exceed BAAQMD thresholds, however, and would still be significant under this alternative.

The Reduced Density Alternative would not avoid the less than significant land use compatibility impacts of locating residential units adjacent to existing industrial uses or the impacts resulting from the presence of hazardous materials users and contamination in the site vicinity.

The Reduced Density Alternative would reduce the height and mass/scale of the proposed buildings, and therefore, would further reduce the project's less than significant visual impacts. Because this alternative would result in fewer residential units, this alternative would also slightly reduce the project's less than significant utilities and services impacts.

While this alternative would allow for different unit types, this alternative assumes that the residential units could be built throughout the entire site, similar to the proposed project. Therefore, the impacts of ambient noise levels would be similar to the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to the proposed project. In addition, the impacts to significant size trees would be similar to the proposed project. The Reduced Density Alternative would be affected by the same existing high ambient noise levels as the proposed project.



REDUCED DENSITY ALTERNATIVE

FIGURE 16

7.3.2 Relationship to Project Objectives

This alternative would not fully meet the project objectives because this alternative would allow for a substantially lower number of residential units on the infill site. If the amount of development allowed under this alternative would not generate sufficient revenue to meet the applicants' objectives for redeveloping the two specific project sites, this alternative might not be economically feasible.

7.3.3 Conclusion

Overall, however, the Reduced Density Alternative would be environmentally superior to the proposed project, because it would reduce the project's long-term traffic and regional air quality impacts, and would further reduce the project's less than significant visual impacts. The Reduced Density Alternative would not avoid the less than significant impacts resulting from the presence of hazardous materials users and contamination in the site vicinity or the land use compatibility impacts of locating residential units adjacent to existing industrial uses. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project.

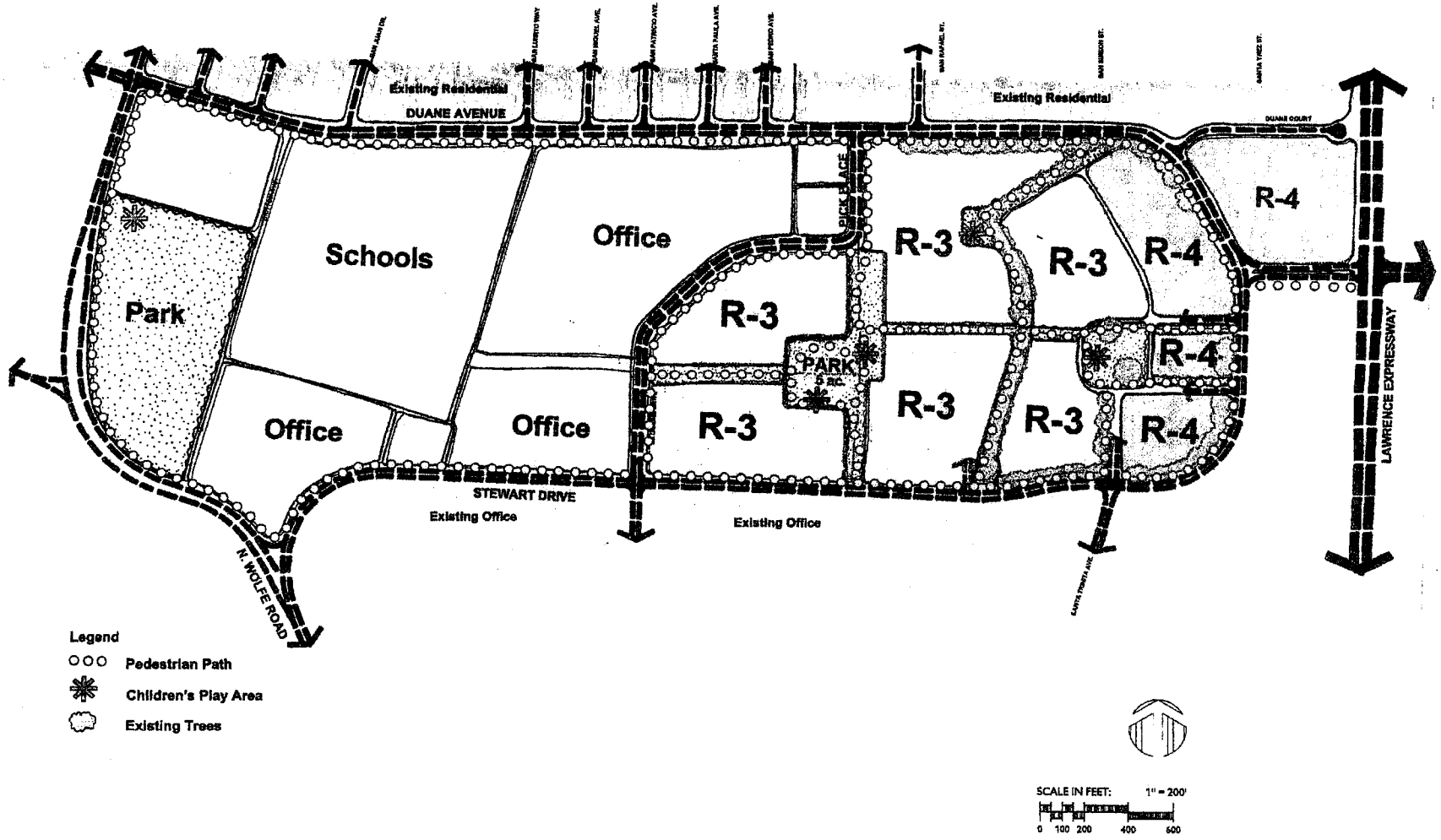
7.4 SMALLER SITE ALTERNATIVE

Another alternative to the proposed ITR project would be the designation of a smaller portion of the site as appropriate for conversion to residential uses. Under this alternative, only the properties in subareas 1 and 2 of the site (everything east of DeGuigne Drive), approximately 84 acres of the overall site, would be converted to the ITR designation. The residential designations on these properties would be the same as under the proposed scenario (see Figure 17). Therefore, this alternative assumes that the same type of residential units could be built on the smaller site. Under this alternative, a maximum of 2,049 residential units could be built on the smaller site.

7.4.1 Comparison of Environmental Impacts

The Smaller Site Alternative would reduce the amount of traffic generated on the site, roughly by 28 percent, thereby reducing some of the significant (but mitigated) traffic impacts to the surrounding area. After subtracting out the traffic currently being generated by the existing light industrial uses which would be replaced on the site, the Smaller Site Alternative would generate approximately 1,607 net fewer daily traffic trips, with 688 fewer trips occurring in the AM peak hour and 319 fewer trips occurring in the PM peak hour, than the proposed GPA scenario. With this reduction in traffic trips, this alternative would avoid the significant (but mitigated) long-term traffic impacts at the Fair Oaks/Arques Avenue intersection, but would not avoid the impacts at the Stewart Drive/Duane Avenue intersection (refer to Chapter 5 and Table 8 of Appendix F).

The regional air quality impacts associated with the traffic would also be reduced proportionally. The regional air pollutants produced by project traffic would still substantially exceed BAAQMD thresholds, however, and would still be significant under this alternative.



SMALLER SITE ALTERNATIVE

FIGURE 17

Although this alternative would reduce the number of units proposed near the *Spansion* and *Metelics* plants, which would reduce exposure to a release from one of these facilities (refer to Section *2.5 Hazards and Hazardous Materials*), given their locations on the site (along DeGuigne Drive and Stewart Drive), the Smaller Site Alternative would not avoid the less than significant impacts resulting from the presence of hazardous materials users and contamination in the site vicinity. This alternative would also not avoid the less than significant land use compatibility impacts of locating residential units adjacent to existing industrial uses.

This alternative would result in similar noise exposure impacts from traffic levels on Lawrence Expressway and Duane Avenue as the proposed GPA scenario. This alternative would also result in similar less than significant water quality, visual, and utilities and services impacts as the proposed project. While the area of construction would be smaller under this alternative, the overall construction impacts related to clearing and grading operations, such as short-term noise, dust, water quality, and tree impacts, would also be comparable to the proposed project.

7.4.2 Relationship to Project Objectives

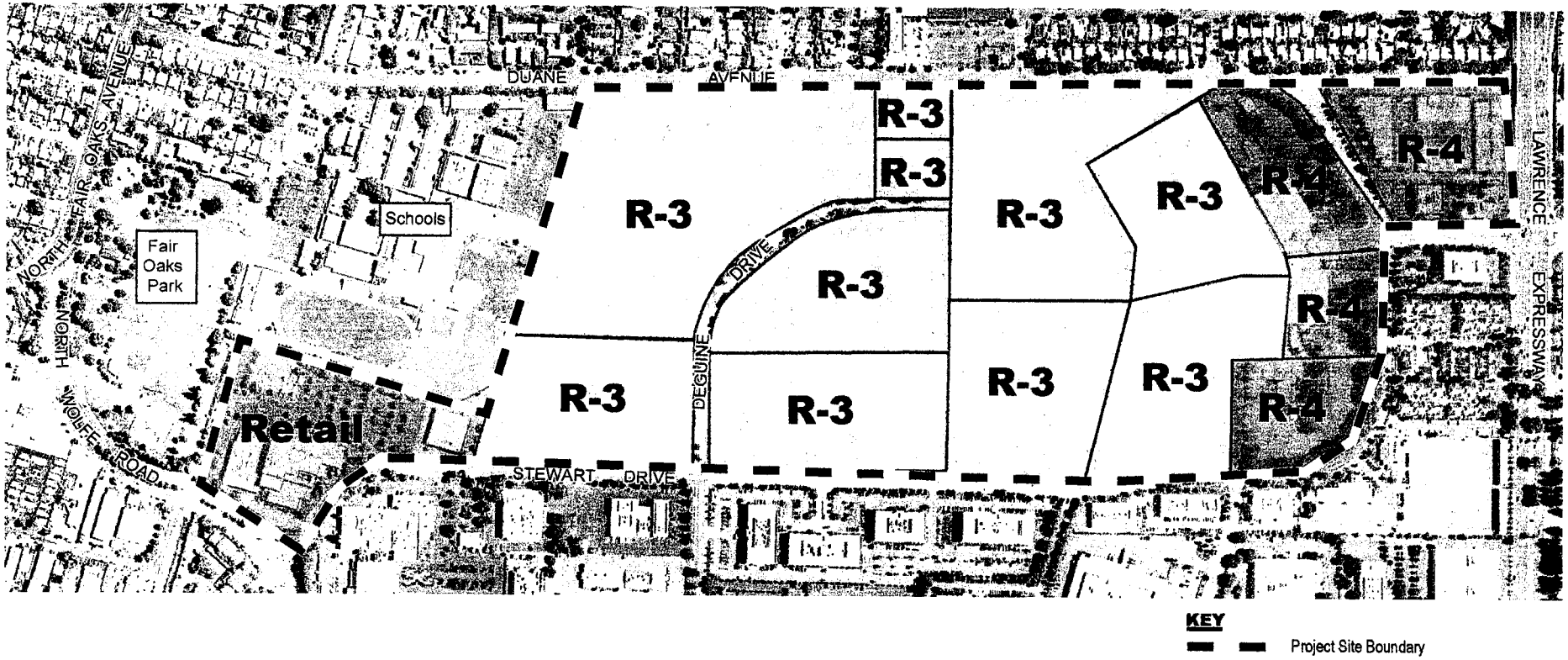
Because this alternative would allow for the development of fewer units, this alternative would not fully meet the project objectives. This alternative would, however, allow for the same number of residential units to be built on the two specific project sites as currently proposed.

7.4.3 Conclusion

Overall, the Smaller Site Alternative would be environmentally superior to the proposed project, because it would reduce the project's traffic and air quality impacts. This alternative would result in similar less than significant land use compatibility, hazardous materials, noise exposure, and visual and aesthetic impacts as the proposed project. While the ITR site would be smaller under this alternative, most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project. Because this alternative would allow for the same amount of residential development on the two specific development project sites, this alternative would be generally consistent with the project objectives.

7.5 FLOATING PARK ALTERNATIVE

An alternative to the proposed land use plan (shown on Figure 5) would allow for at least 10.13 acres of floating parkland on the site rather than the parkland and trails shown on the proposed site plan. Under this alternative, the combining district zoning designations on the parcels of the site would be the same as proposed (refer to Figure 5) and the same overall maximum number of units would be allowed as currently proposed. The zoning designations on each parcel would include parameters to establish the same maximum number of units on the site, once the park sites have been established. The main difference between this alternative and the proposed project is that the parks and open space areas may not be as shown on Figure 5 (see Figure 18). The exact location and sizes of public parks on the site would be determined through preparation of a land plan subsequent to action on the proposed project.



Note: The exact location and sizes of public parks and open space areas on the site would be determined as specific development projects are proposed.

FLOATING PARK ALTERNATIVE

FIGURE 18

7.5.1 Comparison of Environmental Impacts

Because the Floating Park Alternative would allow for the same overall number and types of units as the proposed project scenario, this alternative would result in the same significant air quality impacts as the proposed project.

The Floating Park Alternative would allow for the same type of residential development as the proposed project scenario. Therefore, this alternative would also be subject to the same less-than-significant land use compatibility, hazardous materials, and noise exposure impacts. This alternative would also result in the same less-than-significant traffic, water quality, visual, and utilities and services impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would also be comparable to the proposed project.

7.5.2 Relationship to Project Objectives

Because this alternative would allow for the same amount of residential and commercial development on the site, this alterative would generally be consistent with the project objectives. By not designating specific park areas on each parcel, however, it is possible that parks may not be located in proximity to each proposed neighborhood. Therefore, this alternative may not fully meet the project objective of providing potential areas for future parks in proximity to proposed neighborhoods.

7.5.3 Conclusion

Overall, the Floating Park Alternative would be environmentally similar to the proposed project, because it would result in the same environmental impacts as the proposed project scenario. In the event specific park locations selected do not fully meet the needs of each neighborhood, this alternative may not meet the guidelines and policies of the City's *Open Space Sub-Element* and the *Land Use and Transportation Element* of the General Plan, as well as the National Recreation and Park Association (NRPA) standards and guidelines, which recommend that, at a minimum, park systems be composed of 6.25 to 10.5 acres of developed open space per 1,000 population (refer to Section *3. Availability of Public Services* of this EIR).

This alternative would be less consistent than the proposed project with the project objectives. Because specific park areas may not ultimately be designated in proximity to each proposed neighborhood, this alternative may not fully meet the project objective of providing areas for future parks, in proximity to proposed neighborhoods.

7.6 ALTERNATIVE LAND USE

Another alternative to the proposed project would be to develop the project site with an alternative land use, such as commercial (retail) uses. This alternative would allow for a mix of commercial uses, such as neighborhood retail and larger-format retail uses, on the site. However, this alternative would not allow for any residential uses on the site.

7.6.1 Comparison of Environmental Impacts

This alternative would likely generate more average daily traffic trips than the residential units, however, commercial trips are typically spread throughout the day, resulting in less peak-hour trips (particularly AM peak hour trips). Therefore, this alternative could potentially reduce the significant (but mitigated) traffic impacts of the project. Air quality impacts would remain significant, however, under this alternative.

Because the uses allowed under this alternative would not include residential, and because commercial uses are typically not as sensitive to industrial operations and high noise levels, developing the site with commercial uses, as opposed to residential uses, would avoid the project's less than significant impacts associated with the presence of hazardous materials on the site and the less than significant land use compatibility impacts.

Consistent with the City's requirements for general business commercial sites, this alternative assumes that such commercial uses could be developed at heights up to 75 feet, which would be taller than the proposed residential development, and could increase the visual and aesthetic impacts.

Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to the proposed project. In addition, the impacts to significant size trees would be similar to the proposed project.

7.6.2 Relationship to Project Objectives

This alternative would not be consistent with the project objectives of providing residential uses within the City of Sunnyvale. It is not known whether commercial development would be economically viable on the entire site. If the development allowed under this alternative would not generate sufficient revenue to meet the City's and applicants' objectives for redeveloping the site, this alternative might not be economically feasible.

7.6.3 Conclusion

The Alternative Land Use could potentially reduce the significant (but mitigated) traffic impacts of the project and would reduce the project's less than significant hazardous materials, land use compatibility, and noise exposure impacts. Other impacts would be similar to the proposed project. However, because this alternative would not allow for residential uses on the site, this alternative does not meet the project objectives, which include allowing for an increase in available high-quality residential development in Sunnyvale.

7.7 ALTERNATIVE LOCATION

The CEQA Guidelines require that an EIR identify an alternative location that "would avoid or substantially lessen any of the significant effects of the project" [§15126.6 (f) (2) (A)]. For the proposed project, the alternative location should reduce the hazardous materials impacts and further reduce the less than significant land use compatibility, noise exposure, and visual and aesthetic impacts. As discussed previously in this section, the overall objectives of the project are to allow for a mix of uses on the site, including the existing industrial and commercial uses, and to designate the site as appropriate for transition to residential use, to increase the housing stock in Sunnyvale.

The project is proposing a General Plan amendment to change the land use designation on the approximately 130-acre site from *Industry* to *Industrial-to-Residential* and a rezoning on the site from *M-S (Industrial and Service)* to *M-S Industrial-to-Residential* (combined with the appropriate residential zoning). An alternative site would need to be at least of comparable size, within the existing urbanized area of Sunnyvale, and with adequate visibility, roadway access, and utility capacity to serve the development proposed. Since the proposed project site consists of several older industrial sites, an appropriate alternative site might also include developed industrial or commercial properties.

7.7.1 Selection of Alternative Locations

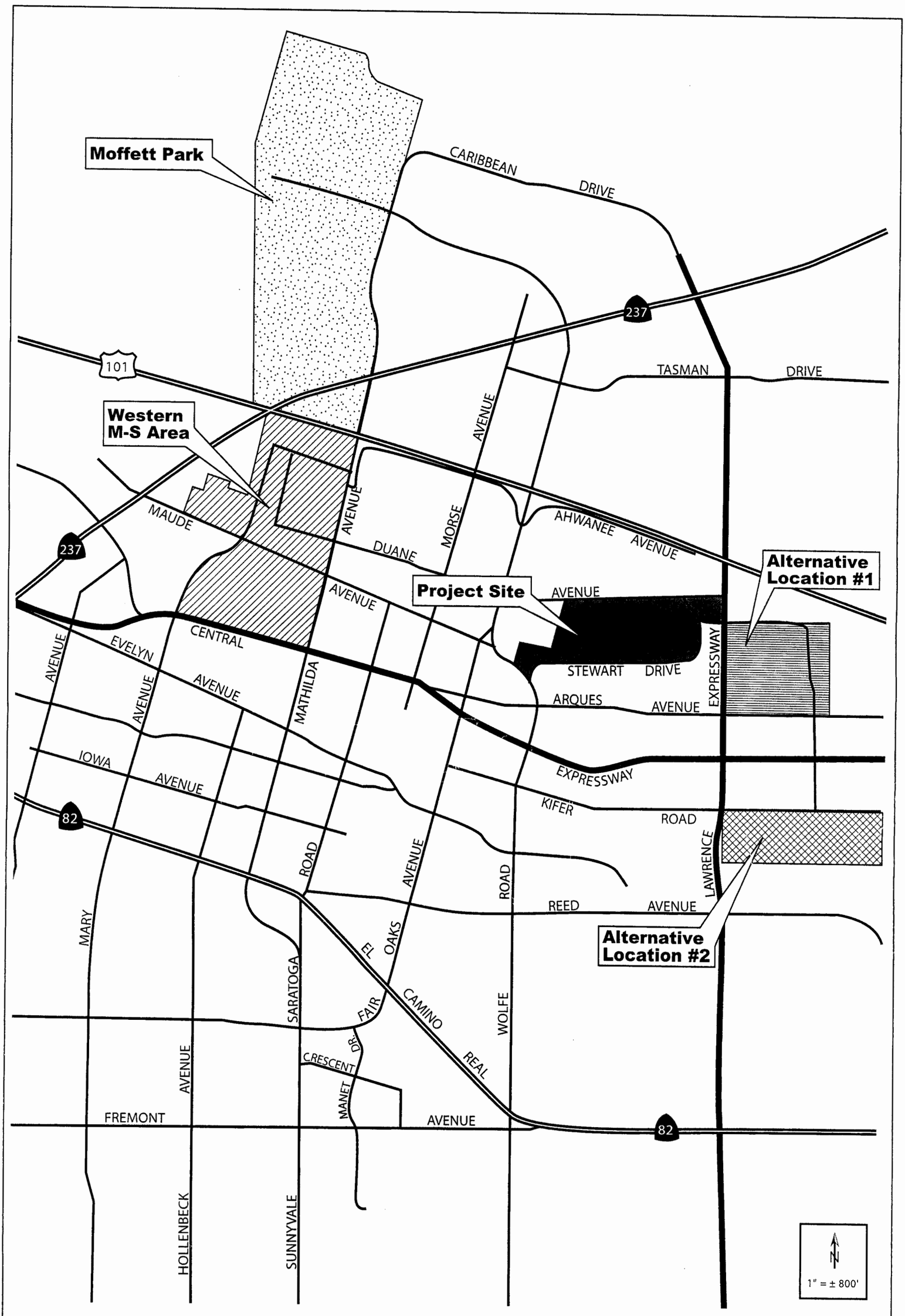
In order to identify an alternative site that might reasonably be considered to "feasibly accomplish most of the basic purposes" of the project, and would also further reduce less than significant impacts, it was assumed that such a site would ideally have the following characteristics:

1. Approximately 130 acres in size;
2. Not designated as Prime Farmland;
3. Located near a freeway and major roadways with good visibility and access;
4. Served by available infrastructure; and
5. Available for immediate development and long-term transition.

Because one of the objectives is to locate the new residential uses within the urban area of Sunnyvale, alternative locations outside the urban boundary were not identified. Similarly, alternative sites which are significantly smaller than the proposed site, and thus would not allow for development of an equivalent number of dwelling units at densities roughly similar to the proposed development, were also rejected.

A review of vacant and underutilized sites in Sunnyvale was conducted in order to identify potentially suitable alternative locations for the project. Potential alternative sites were evaluated in terms of whether they would: 1) reduce or avoid some or all of the environmental impacts of the proposed project; 2) be of sufficient size to meet most of the basic project objectives; and 3) be immediately available to be acquired or controlled by the applicants.

The following properties were identified and their general feasibility as alternative locations is discussed below. Figure 19 shows the location of the alternative location sites.



ALTERNATIVE LOCATIONS

FIGURE 19

7.7.1.1 East of Lawrence Expressway and South of Oakmead Parkway

This site consists of approximately 136 acres of industrial property, located east of Lawrence Expressway between Oakmead Parkway and Arques Avenue (refer to Figure 19). These properties are designated *M-S (Industrial and Service)*, similar to the project site, and are occupied by various industrial, office, and commercial uses.

7.7.1.2 East of Lawrence Expressway and South of Kifer Road

This site consists of approximately 107 acres of industrial property located east of Lawrence Expressway south of Kifer Road (refer to Figure 19). These properties are also designated *M-S (Industrial and Service)*, similar to the project site, and are occupied by various industrial, office, and commercial uses.

7.7.1.3 Rejected Alternative Location Sites

Two additional sites were identified as potential alternative locations for the proposed project but these sites have constraints that would preclude them from reducing or avoiding the project's impacts, and therefore, from being feasible alternatives. These sites are listed below with a brief explanation of their constraints:

Moffett Park

Moffett Park consists of many large parcels, but residential uses are not allowed due to Moffett Park Specific Plan regulations. Therefore this site is considered infeasible and is not discussed further.

Western M-S (Industrial and Service) Area

This area is generally located south of US 101, east of SR 237, north of California Avenue, and west of Mathilda Avenue (refer to Figure 19). The parcels are zoned *M-S (Industrial and Service)* and the development of residential and commercial uses are allowed under this zoning. Residential uses, however, would not be allowed because this area is located within the Moffett Federal Airfield crash zone (AICUZ). For this reason, this area is considered infeasible and is not discussed further.

7.7.2 Comparison of Environmental Impacts

Similar to the project site, each of the two alternative locations (east of Lawrence Expressway) is also subject to existing soil and groundwater contamination from on-site and off-site sources. Therefore, development of the proposed project at either alternative location would result in similar impacts to the presence of hazardous materials contamination and from hazardous materials users in the general vicinity. Because industrial uses are located to the west of these areas, residential uses on this alternative site may also be subject to similar land use compatibility impacts as on the project site.

Because this alternative assumes the same amount of development, these alternative locations would generally result in the same traffic and air quality impacts as the proposed project site, although the specific intersections affected may be slightly different. In addition, the less-

than-significant visual/aesthetic and utilities and services impacts would be similar to the proposed project site. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, and impacts to biological resources, would be comparable to those from the proposed project.

7.7.3 Relationship to Project Objectives

Neither of the alternative locations is under the control of the applicants, and it is not known whether the applicants could reasonably acquire or gain control of these properties. These locations would, however, generally be consistent with the City's option of providing residential uses within infill locations in the City.

7.7.4 Conclusion

Because this alternative assumes the same amount of development, these alternative locations would generally result in the same traffic and air quality impacts as the proposed project site, although the specific intersections affected may be slightly different. Development of the proposed project at either alternative location would result in similar less than significant impacts from the presence of hazardous materials users and existing contamination in the vicinity. Residential uses on these alternative sites would also be subject to similar land use compatibility and noise exposure impacts as on the project site.

The overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to those from the proposed project.

Neither of the alternative locations is under the control of the applicants, and it is not known whether the applicants could reasonably acquire or gain control of these properties. These locations would, however, generally be consistent with the City's objective of providing residential uses within infill locations in the City.

7.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the above discussion, the environmentally superior alternative is the No Project Alternative, because all of the project's significant environmental impacts would be avoided. However, Section 15126.6(e)(2) states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

Based upon the previous discussion, the Alternative Land Use would be the environmentally superior alternative, because this alternative would reduce the project's significant (but mitigated) noise and utility and service system impacts and would also reduce the less than significant hazardous materials and land use compatibility impacts of the proposed project. However, this alternative would not meet the project's objectives of allowing for an increase in available high-quality residential development in Sunnyvale in proximity to jobs.

TABLE 27:
MATRIX COMPARISON OF PROJECT ALTERNATIVE IMPACTS

Impacts	Proposed Project	Alt. 7.1 No Project	Alt. 7.2 Red. Density Alt.	Alt. 7.3 Smaller Site Alt.	Alt. 7.4 Floating Park Alt.	Alt. 7.5 Alt. Land Use	Alt. 7.6 Alt. Location
Significant Impacts							
Land Use – Construction	SM	**NI**	SM	SM	SM	SM	SM
Long-Term Traffic	SM	**NI**	SM	SM	SM	SM	SM
Regional Air Quality	SU	**NI**	SU	SU	SU	SU	SU
Subject to High Noise Levels	SM	**NI**	SM	SM	SM	**LTS**	SM
Sanitary Sewer	SM	**NI**	**LTS**	**LTS**	SM	**LTS**	SM
Other Less Than Significant Impacts							
Land Use Compatibility	LTS	**NI**	LTS	LTS	LTS	**LTS**	LTS
Hazardous Materials	LTS	**NI**	LTS	LTS	LTS	**LTS**	LTS
Visual/Aesthetic	LTS	**NI**	LTS	LTS	LTS	SU	LTS
Loss of Trees	SM	**NI**	SM	SM	SM	SM	SM
Hydrology/Water Quality	LTS	**NI**	LTS	LTS	LTS	SM	LTS
Other Utilities and Services	LTS	**NI**	LTS	LTS	LTS	LTS	LTS
Temporary Construction	SM	**NI**	SM	SM	SM	SM	SM
Fully Meets Project Objectives†	YES	NO	NO	NO	NO	NO	NO

Notes:
LTS = Less Than Significant or Reduced to a Less Than Significant Level; SM = Significant, but can be Mitigated to a Less Than Significant Level
SU = Significant Unavoidable or Unmitigated Impact; NI = No Impact
Bold = *Environmentally Superior to the Proposed Project*

8. REFERENCES

Association of Bay Area Governments. Dam Failure Inundation Hazard Map for Sunnyvale. 20 October 2003. ABAG. 18 February 2005. http://www.abag.ca.gov/cgi-bin/pickdamz.pl.

Association of Bay Area Governments. Tsunami Hazard Map. 12 August 2004. California Office of Emergency Services. 18 March 2005. http://www.abag.ca.gov/bayarea/eqmaps/tsunami/tsunami.html.

Ballanti, Donald, Certified Consulting Meteorologist. Air Quality Impact Analysis for the Proposed East Sunnyvale Industrial to Residential Project, City of Sunnyvale. August-September 2006.

Bay Area Air Quality Management District. CEQA Guidelines. December 1999.

California Energy Commission. Project Fact Sheets. 26 November 2003. State of California. 9 November 2004. http://www.energy.ca.gov/peakload/project_fact_sheets.html.

California Integrated Waste Management Board. Estimated Solid Waste Generation Rates for Service Establishments. 5 January 2004. 5 February 2004. http://www.ciwmb.ca.gov/wastechar/WasteGenRates/WGServic.htm.

California Stormwater Quality Association. California Stormwater BMP Handbook. January 2003. 30 March 2005. http://www.cabmphandbooks.com/Documents/Development/MP-51.pdf.

City of Sunnyvale. Air Quality Sub-Element of the General Plan. July 1993.

City of Sunnyvale. City-Wide Design Guidelines. 1994.

City of Sunnyvale. Community Design Sub-Element of the General Plan. December 1990.

City of Sunnyvale. Field Services: Water Supply. 2 February 2005. http://sunnyvale.ca.gov/Departments/Public+Works/Water+Supply/.

City of Sunnyvale. General Plan Executive Summary. June 1995.

City of Sunnyvale. Heritage Resource Inventory. December 2004.

City of Sunnyvale. Housing and Community Revitalization Sub-Element. January 2002.

City of Sunnyvale. Land Use and Transportation Element. November 1997.

City of Sunnyvale. Local Landmarks. September 2004.

City of Sunnyvale. Noise Sub-Element of the General Plan. 25 March 1997.

City of Sunnyvale. Seismic Safety Sub-Element. 20 March 1984.

City of Sunnyvale. Solid Waste and Recycling. 14 March 2005. http://sunnyvale.ca.gov/Departments/Public+Works/Solid+Waste+and+Recycling/home.htm #Goals.

City of Sunnyvale. Sunnyvale Properties Within Flood Zones. 14 February 2005. http://sunnyvale.ca.gov/Departments/Public+Works/Flood+Zone/.

City of Sunnyvale. Sustainable Development and Green Buildings Policy. Adopted February 24, 2004.

Crime Analysis Unit, Sunnyvale Department of Public Safety. Sunnyvale Crimes (2003-2004). Table. 2 February 2005.

Hexagon Transportation Consultants. Transportation Impact Analysis. March-September, 2006.

HortScience. Tree Census Summary of East Sunnyvale ITR Project Site. April-May, 2006.

HortScience. Tree Survey. Duane Avenue Property. May, 2006.

HortScience. Tree Survey. Taylor Woodrow Site. April, 2006.

Illingworth & Rodkin. East Sunnyvale ITR Environmental Noise Assessment. April 12, 2006 and Revised July 28, 2006.

Mark Thomas & Company. East Sunnyvale ITR Project Sanitary Sewer System Analysis. April-October 2006.

Mark Thomas & Company. East Sunnyvale ITR Project Water System Analysis. April 2006.

Schaaf & Wheeler. East Sunnyvale ITR Project Hydrology and Water Quality Analysis. February-March 2006.

State of California. 2004 Area Designations for State Ambient Air Quality Standards OZONE. Map. 18 October 2003. California Air Resources Board. 21 April 2005. http://www.arb.ca.gov/desig/adm/adm.htm.

State of California. 2004 Area Designations for State Ambient Air Quality Standards PM10. Map. 18 October 2003. California Air Resources Board. 21 April 2005. http://www.arb.ca.gov/desig/adm/adm.htm.

State of California Integrated Waste Management Board. Active Landfills Profile for Kirby Canyon Recycl. & Disp. Facility (43-AN-0008). 30 March 2005. http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=41&FACID=43-AN-0008.

State of California. Office of Historic Preservation. 30 March 2005. http://ohp.parks.ca.gov/default.asp?page_id=21522.

Todd Engineers. Draft Water Supply Assessment for City of Sunnyvale Industrial to Residential Conversion. April 4, 2006.

TRC Lowney. Geotechnical Feasibility Consultation, East Sunnyvale ITR Project, Sunnyvale California. January 30, 2006.

TRC Lowney. Hazardous Materials Evaluation, 130-acre East Sunnyvale ITR Site, Sunnyvale, California. April 12, 2006.

TRC Lowney. Screening Level Chemical Risk Appraisal. ITR Study Area, Sunnyvale, California. September 21, 2006.

United States Department of Energy, Energy Efficiency and Renewable Energy. Energy and Environmental Guidelines for Construction. 8 July 2004. United States Department of Energy. 9 September 2004. http://www.eere.energy.gov/buildings/info/design/construction.html#construction.

United States Department of Energy, Energy Efficiency and Renewable Energy. Technologies. 30 October 2003. United States Department of Energy. 9 September 2004. http://www.eere.energy.gov/buildings/highperformance/technologies.html

PERSONS CONTACTED

Alvarez, Leonardo. Senior Project Geologist. TRC Lowney. Personal and Written Communications. 2005-2006.

Anderson, Chuck. Principal. Schaaf & Wheeler, Consulting Civil Engineers. Personal and Written Communications. 2005-2006.

Ballanti, Donald. Certified Consulting Meteorologist. Personal and Written Communications. 2005-2006.

Bentley, Gail. Solid Waste Division Operations Specialist, Department of Public Works Written communications. September-October 2006.

Bowers, Mark. City of Sunnyvale. Written Communications. May 12, 2006.

Brennan, Ed. Project Manager. HortScience. Personal and Written Communications. 2005-2006.

Chu, Judy. Civil Engineer. Department of Public Works/Engineering. Personal and Written Communications. 2006.

Clark, Jim. President. HortScience. Personal and Written Communications. 2005-2006.

Friz, Mark. City of Sunnyvale Department of Public Safety. Personal Communications. 2005-2006.

Gervin, Lorrie. Environmental Division Manager. City of Sunnyvale, Written Communications. May 2006.

Helm, Ron. President and Senior Principal Geologist. TRC Lowney. Personal and Written Communications. 2005-2006.

Huttlinger, Peter. Senior Engineer. Mark Thomas and Company. Personal and Written Communications. 2005-2006.

Jackson, Brian. Associate. Hexagon Transportation Consultants. Personal and Written Communications. 2005-2006.

Keegan, Barbara. Assistant Director of Department of Public Works. Personal and Written Communications. 2006.

Picard, Dr. Benjamin. Deputy Superintendent. Sunnyvale School District. Personal Communications. 2006.

Priestaf, Iris. Principal. Todd Engineers. Personal and Written Communications. 2005-2006.

Reilly, Maureen. Senior Engineer. Todd Engineers. Personal and Written Communications. 2005-2006.

Spain, Shelby. Director – Guidance and Community College Programs. Fremont Union High School District. Personal and Written Communications. September-October, 2006.

Stivers, Mark. City of Sunnyvale Department of Public Safety. Personal Communications. March 2005.

Thill, Michael. Illingworth & Rodkin. Personal and Written Communications. 2005-2006.

Walinski, Brett. Hexagon Transportation Consultants. Personal and Written Communications. 2005-2006.

9. AUTHORS AND CONSULTANTS

Authors:

City of Sunnyvale
Department of Community Development, Planning Division
Trudi Ryan, Planning Officer
Gerri Caruso, Principal Planner
Steve Lynch, Senior Planner
Kelly Diekmann, Associate Planner

Consultants:

David J. Powers and Associates, Inc.
Environmental Consultants and Planners
San José, CA
Judy Shanley, President
John Schwarz, Principal Project Manager
Kristy Le, Project Manager
Stephanie Grotton, Graphic Artist

Donald Ballanti
Certified Consulting Meteorologist
Donald Ballanti, Principal

Hexagon Transportation Consultants
Transportation Consultants
Gary Black, President
Brett Walinski, Principal Associate
Brian Jackson, Associate

HortScience
Arborists
Jim Clark, Principal
Ed Brennan, Project Manager

Mark Thomas & Company
Civil Engineers
Jim Sims, Principal & Regional Division Manager
John Hart, Project Manager
Peter Huttlinger, Senior Engineer

Illingworth & Rodkin
Acoustical Consultants
Michael Thill, Senior Project Manager
Clayton Anderson, Project Manager

Consultants:

Schaaf & Wheeler
Consulting Civil Engineers
Chuck Anderson, Principal

Todd Engineers
Water Engineers
Iris Priestaf, Principal
Maureen Reilly, Senior Engineer

TRC Lowney
Geotechnical and Hazardous Materials Consultants
Ron Helm, President & Senior Principal Geologist
Leonardo Alvarez, Senior Project Geologist
Scott Fitinghoff, Area Manager
Laura Knutson, Senior Project Engineer
Minh Le, Senior Staff Engineer
Margo Mackey, Environmental Consultant